

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

What is claimed:

- B5-
1. (Canceled without prejudice)
 2. (Canceled without prejudice)
 3. (Canceled without prejudice)
 4. (Canceled without prejudice)
 5. (Canceled without prejudice)
 6. (Canceled without prejudice)
 7. (Canceled without prejudice)
 8. (Canceled without prejudice)
 9. (Canceled without prejudice)
 10. (Canceled without prejudice)
 11. (Canceled without prejudice)
 12. (Canceled without prejudice)
 13. (Canceled without prejudice)
 14. (Canceled without prejudice)
 15. (Canceled without prejudice)
 16. (Canceled without prejudice)
 17. (Canceled without prejudice)
 18. (Canceled without prejudice)
 19. (Canceled without prejudice)
 20. (Canceled without prejudice)
 21. (Canceled without prejudice)
 22. (Canceled without prejudice)
 23. (Canceled without prejudice)

24. (Canceled without prejudice)
25. (Canceled without prejudice)
26. (Canceled without prejudice)
27. (Amended) A circuit structure, comprising, ~~in the following order:~~
an integrated circuit package;
at least one signal pin; ~~and~~
a circuit board ~~or substrate, the signal pin being supported by a support member~~
~~or the signal pin being fluted; and~~
a support member for supporting the at least one signal pin, the at least one
signal pin and the support member being disposed between the integrated circuit
package and the circuit board, the at least one signal pin electrically and physically
interconnecting the circuit board and the integrated circuit package.
28. (Amended) The circuit structure of Claim 27, wherein the support member is
a two or more pin stanchion, the stanchion being a vertically oriented member of
insulating material which has holes allowing the passage of the at least one signal pin in
a vertical orientation with respect to a plane of major extension of the circuit board
pins.
29. (Original) The circuit structure of Claim 28, wherein the support member is
placed only at the corners of the integrated circuit package.
30. (Original) The circuit structure of Claim 28, wherein the support member
entirely encloses an area.
31. (Amended) The circuit structure of Claim 30, further comprising wherein
there are a signal pins which is ~~are~~ unsupported by a stanchion in the area enclosed by
the support member.

32. (Original) The circuit structure of Claim 27, wherein the support member is a layer of insulating material oriented parallel to the plane of major extension of the circuit board, the support member having holes for allowing the passage of the signal pins.

33. (Original) The circuit structure of Claim 32, wherein the support member forms a permanent part of the circuit structure.

34. (Amended) The circuit structure of Claim 32, wherein the support member ~~either dissolves with the application of heat or is washed away with water.~~

35. (Amended) The circuit structure of Claim 27, wherein the at least one signal pin is cylindrical and is non-fluted.

36. (Amended) The circuit structure of Claim 27, wherein the at least one signal pin is fluted.

37. (Canceled without prejudice)

38. (Amended) The circuit structure of Claim 36, the at least one signal pin comprising a cap at one end.

39. (Amended) The circuit structure of Claim 38, wherein the cap is screwed onto the at least one signal pin.

40. (Previously Added) The circuit structure of Claim 38, wherein the cap is made of a high dielectric constant material.

41. (Amended) The circuit structure of Claim 40, wherein the support member is a permanent, insulating stanchion that supports the at least one signal pin.

42. (Previously Added) The circuit structure of Claim 38, wherein the cap is made of conductive material.

43. (Amended) The circuit structure of Claim 42, wherein the integrated circuit package has a recess and the cap adheres to the a recess on the integrated circuit package through an adhesive melt.

44. (Amended) The circuit structure of Claim 43, wherein the support member is a permanent, insulating stanchion that supports the at least one signal pin.

45. (Amended) The circuit structure of Claim 27, wherein the at least one signal pin is fluted and is supported by the support member.

46. (New) The circuit structure of Claim 38, wherein the cap has a maximum height approximately equal to one third of the diameter of a standardized solder ball useable to connect the integrated circuit package to the circuit board.

47. (New) The circuit structure of Claim 27, wherein the integrated circuit package is a ball grid array package.

48. (New) The circuit structure of Claim 27, wherein the integrated circuit package is a pin ball grid array package.

49. (New) The circuit structure of Claim 27, wherein the at least one signal pin is attached to the integrated circuit package with metallic solder.

50. (New) The circuit structure of Claim 27, wherein the at least one signal pin is attached to the integrated circuit package with conductive adhesive.

51. (New) The circuit structure of Claim 27, wherein the support member is a dissolving type of membrane.

52. (New) The circuit structure of Claim 51, wherein the dissolving type of membrane dissolves with the application of heat.

53. (New) The circuit structure of Claim 51, wherein the dissolving type of membrane dissolves in water.

54. (New) The circuit structure of Claim 32, wherein the support member is capable of being washed away with water.

55. (New) A circuit structure, comprising:
an integrated circuit package;
a circuit board; and
at least one fluted signal pin being disposed between the integrated circuit package and the circuit board, the at least one fluted signal pin electrically and physical interconnecting the circuit board and the integrated circuit package.

56. (New) The circuit structure of Claim 55, the at least one fluted signal pin comprising a cap at one end.

57. (New) The circuit structure of Claim 56, wherein the cap is screwed onto the one end of the at least one fluted signal pin.

58. (New) The circuit structure of Claim 56, wherein the cap is made of a high dielectric constant material.